

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of

Improving Public Safety Communications in the
800 MHz Band

Consolidating the 900 MHz Industrial/Land
Transportation and Business Pool Channels

WT Docket No. 02-55;
DA 02-2202; DA 02-2306

COMMENTS OF THE BOEING COMPANY

The Boeing Company (“Boeing”), by its attorneys, hereby files these comments in response to the Commission’s *Public Notices* in the above-captioned proceeding.¹ Boeing is gratified that the Wireless Bureau broadened the scope of its original *Public Notice* beyond the “Consensus Plan” to welcome comment on other substantive proposals also not contained in the *NPRM*, including the proposal to relocate Public Safety users to the Upper 700 MHz band² and

¹ See *Wireless Telecommunications Bureau Clarifies Scope of Comments Sought in 800 MHz Public Safety Proceeding*, Public Notice, WT Docket No. 02-55 (rel. Sept. 17, 2002); *Wireless Telecommunications Bureau Seeks Comment on “Consensus Plan” Filed in the 800 MHz Public Safety Interference Proceeding*, Public Notice, DA 02-2202 (rel. Sept. 6, 2002); *Improving Public Safety Communications in the 800 MHz Band; Consolidating the 900 MHz Industrial/Land Transportation and Business Pool Channels*, Notice of Proposed Rulemaking, WT Docket No. 02-55, 17 FCC Rcd 4783 (2002) (“*NPRM*”).

² See e.g., Reply Comments of Alltel Communications, Inc.; AT&T Wireless Svcs., Inc.; Cingular Wireless LLC; Coupe Communications, Inc.; First Cellular; Nokia, Inc.; Southern LINC; and U.S. Cellular Co., WT Docket No. 02-55 at 8-12 (filed Aug. 7, 2002) (“700 MHz Alliance”); Letter from Terry Addington, President & CEO, FIRSTCellular, *et al.*, to The Honorable Michael K. Powell, Chairman, Federal Communications Commission (filed Apr. 26,

Motorola's reply comment proposal to reband 800 MHz differently in different geographic areas.³ All three of these proposals (and, indeed, others) have different sets of merits and, due to the limited timeframe between the second *Public Notice* and the comment filing date, Boeing may submit additional input for consideration on these and any other plans at a later date.⁴

Effective, interference-free Public Safety communications should be the Commission's top priority in this proceeding. To this end, let Boeing's view on the "Consensus Plan" be unequivocal: The "Consensus Plan" does not represent a broad industry consensus, it is not the best solution for Public Safety interference, and Boeing does not support it. Based on its analysis, Boeing believes that relocating Public Safety licensees to the Upper 700 MHz band is by far a superior, more comprehensive, and more equitable solution that would resolve permanently Public Safety interference problems while at the same time offering Public Safety users added benefits.

I. THE "CONSENSUS PLAN" DOES NOT REPRESENT INDUSTRY CONSENSUS

The "Consensus Plan" is supported by 17 industry participants.⁵ Far from industry consensus, this level of support amounts to a minority position when compared to the total

2002) (describing the Coalition proposal) (available as an *ex parte* presentation in WT Docket No. 99-168 and GN Docket No. 01-74).

³ See Reply Comments of Motorola, Inc., WT Docket No. 02-55 (filed Aug. 7, 2002). Motorola's proposal would reband each geographic area differently based on the ratios of spectrum licensed to the various service categories in each area.

⁴ The Commission significantly broadened the scope of its query less than a week before comments were due and did not correspondingly extend the comment filing deadline on its own motion.

⁵ See Reply Comments of the Private Wireless Coalition, Nextel, and Public Safety Organizations, WT Docket No. 02-55 (filed Aug. 7, 2002) ("Joint Commenters").

number of participants that have commented in this proceeding.⁶ It is clear that there are a variety of alternatives currently being considered in this proceeding that have significant support from many more interested parties. Therefore, at most, the “Consensus Plan” should be viewed as a consensus limited to the few parties supporting the proposal.

Further, it appears that Nextel is the driving force behind the “Consensus Plan.” Nextel has lobbied the Commission about this proceeding *ten times* since reply comments were filed. In contrast, other supporters of the “Consensus Plan” met only twice with the Commission (once along with Nextel). This is consistent with the view that the solution contained in the “Consensus Plan” is driven primarily by Nextel’s interests and is neither a broad consensus nor in the best interests of Public Safety licensees.

The Commission should avoid the temptation to adopt the “quick fix” that is proposed under the misleading moniker of “consensus” and instead work to reach a comprehensive and balanced resolution to all of the issues implicated in resolving harmful interference in the 800 MHz band. To this end, Boeing believes that Public Safety licensees would be better served if the Commission adopted the Upper 700 MHz proposal and combined it with certain aspects of the proposals offered by Motorola and other parties.

II. THE “CONSENSUS PLAN” IS PROHIBITIVELY FLAWED

It is clear that Boeing is not alone in its opposition to the “Consensus Plan.” The record is replete with significant and well reasoned opposition.⁷ Beyond the threshold problem of

⁶ Conservatively, approximately 165 parties filed initial comments and 65 parties filed reply comments in this proceeding. As such, the “Consensus Plan” parties represent approximately 10 percent of the initial commenters and 25 percent of the reply commenters.

⁷ See, e.g., Reply Comments of 700 MHz Alliance at 8-12; Reply Comments of Blooston, Mordkofsky, Dickens, Duffy & Prendergast, WT Docket No. 02-55 at 5 (filed Aug. 7, 2002);

proffering an ineffective solution to the problem of interference to Public Safety communications in the 800 MHz band, the “Consensus Plan” fails to address several other pivotal industry concerns. Due to this lack of a comprehensive framework, the “Consensus Plan” is prohibitively flawed and should not be adopted.

Of central importance to Boeing and many other border region licensees is the lack of comprehensive treatment of unique border region interference issues and frequency assignment constraints in any proposed solution.⁸ These are inherent problems that must be fully addressed. The “Consensus Plan” essentially disregards this complex issue by stating only that “existing proportionate...allocations...will be maintained.”⁹ This statement amounts to the wholesale lack of any plan to address border area issues.

Reply Comments of Carolina Power and Light Co. and TXU Business Svcs., WT Docket No. 02-55 at 3-4 (filed Aug. 7, 2002); Reply Comments of San Diego, WT Docket No. 02-55 at 2-3 (filed Aug. 7, 2002); Reply Comments of the District of Columbia, WT Docket No. 02-55 at 3-4 (filed Aug. 7, 2002); Reply Comments of Mobile Relay Associates, WT Docket No. 02-55 at 1-4 (filed Aug. 7, 2002); Reply Comments of NAM/MRFAC, WT Docket No. 02-55 at 4-7 (filed Aug. 7, 2002); Reply Comments of Pinnacle West Capital Corp., WT Docket No. 02-55 at 5-6 (filed Aug. 7, 2002); Reply Comments of Preferred Communications Sys., Inc., WT Docket No. 02-55 at 1, 4 (filed Aug. 7, 2002); Reply Comments of the Public Safety Improvement Coalition, WT Docket No. 02-55 at 5-6 (filed Aug. 7, 2002); Reply Comments of United Telecom Council, WT Docket No. 02-55 at 2-3 (filed Aug. 7, 2002).

⁸ See, e.g., Reply Comments of the Boeing Company, WT Docket No. 02-55 at 12-14 (filed Aug. 7, 2002) (“Boeing Reply Comments”); Reply Comments of Central Maine Power Co., WT Docket No. 02-55 at 4 (filed Aug. 7, 2002); Reply Comments San Diego, WT Docket No. 02-55 at 5-7 (filed Aug. 7, 2002); Reply Comments of the Consumers Energy Co., WT Docket No. 02-55 at 14-15 (filed Aug. 7, 2002); Reply Comments of Motorola, Inc., WT Docket No. 02-55 at 14 (filed Aug. 7, 2002); Reply Comments of NAM/MRFAC, WT Docket No. 02-55 at 6 (filed Aug. 7, 2002); Reply Comments of Pinnacle West Capital Corp., WT Docket No. 02-55 at 6 (filed Aug. 7, 2002); and Reply Comments of United Telecom Council, WT Docket No. 02-55 at 13 (filed Aug. 7, 2002).

⁹ See Joint Commenters at 16. The Joint Commenters note that they will address the border region issue in a subsequent filing, but no such filing has been submitted.

All rebanding plans are likely to deviate from existing bilateral channel allocation agreements with Canada and Mexico. Therefore, a rebanding solution could take years to implement for affected border region licensees. As discussed in Boeing's prior comments, an appropriate way to protect border region licensees is to adopt a "Do No Harm" policy where, regardless of the solution chosen by the Commission, border area licensees may remain "as is" on a primary basis until appropriate local coordination and subsequent international agreements can be reached that will allow for successful relocation and/or retuning.¹⁰ Boeing urges the Commission to refrain from adopting any proposal that does not fully address the needs of the substantial number of border region licensed users.

A second major flaw in the "Consensus Plan" is that it provides Nextel with a windfall of non-800 MHz spectrum in exchange for relinquishing bits and pieces of its 700, 800, and 900 MHz spectrum holdings. Of particular concern to Boeing is the proposal to give Nextel five megahertz of Mobile Satellite Service ("MSS") spectrum at 2 GHz. Boeing adamantly objects to this proposed MSS spectrum reallocation for all of the reasons it previously documented in this proceeding.¹¹ If the Commission, however, decides to provide non-800 MHz replacement spectrum to Nextel, it should not consider the 2 GHz MSS allocation a viable candidate. Instead of reallocating spectrum from licensed services such as 2 GHz MSS, the Commission could provide replacement spectrum from the allocation recently proposed for 3G (*i.e.*, spectrum from

¹⁰ See Comments of the Boeing Company, WT Docket No. 02-55 at 12-16 (filed May 6, 2002) ("Boeing Comments"); Boeing Reply Comments at 12-14.

¹¹ See Boeing Comments at 27-32; Boeing Reply Comments at 14-17.

the 2110-2165 MHz band).¹² It is Boeing's understanding that the National Association of Manufacturers ("NAM") and MRFAC, Inc. ("MRFAC") are currently considering such a recommendation. Alternatively, the Commission could provide replacement spectrum from the 700 MHz band. Either alternative has the effect of providing replacement non-800 MHz spectrum while at the same time protecting the spectrum allocations of other licensed services.

Finally, the parties to the "Consensus Plan" admit that their proposal does little to satisfy current or future Public Safety spectrum requirements.¹³ In the end, the dramatic overhaul of the 800 MHz band will yield only about 10 megahertz of additional spectrum for Public Safety use. Such a small gain, coupled with no guarantee of an effective and permanent abatement of interference, does not justify the extensive relocation, disruption, and expense that will be suffered by all 800 MHz incumbents as a result of the adoption of the "Consensus Plan." Instead, a 700 MHz relocation proposal, while also resolving the interference problem, would provide an additional 30 megahertz of contiguous spectrum that would help address the current and future needs of Public Safety licensees.¹⁴ This proceeding was initiated to address the needs of Public Safety licensees, and the primary focus of this proceeding should remain on Public

¹² See National Telecommunications and Information Administration, *An Assessment of the Viability of Accommodating Advanced Mobile Wireless (3G) Systems in the 1710-1770 MHz and 2110-2170 MHz Bands* (rel. July 23, 2002) available at <http://www.ntia.doc.gov/reports.html>.

¹³ See Joint Commenters at 27 ("While the Consensus Plan provides some additional public safety spectrum, it will not satisfy future spectrum requirements. Therefore, legislative efforts are also necessary to provide a date-certain for nationwide public safety access to 700 MHz band spectrum already allocated to public safety and to additional Upper 700 MHz spectrum to accommodate a broad scope of federal, state, and local public safety and homeland security activities.").

¹⁴ It is Boeing's understanding that Motorola has recently introduced integrated equipment that could be used for communications between the 700 MHz and 800 MHz bands utilizing a single radio. This would facilitate the continuance of mutual aid agreements between relocated Upper 700 MHz Public Safety licensees and 800 MHz business licensees.

Safety—not Nextel or other interests. The Commission should not shortchange this goal in order to expeditiously complete the proceeding.

The 800 MHz band has been fraught with piecemeal regulatory patches and interference fixes to respond to the proliferation of interleaving, commercial services, and interference in the band. At best, the “Consensus Plan” is just a bigger band-aid to again temporarily address the problem. The “Consensus Plan” inevitably is an inadequate and interim solution to the current array of interference problems being experienced in the band. The Upper 700 MHz proposal, however, would permanently resolve the 800 MHz Public Safety interference problem. At 700 MHz, Public Safety licensees will encounter *none* of the long-standing problems they currently experience in the 800 MHz band.

III. THE OPTIMAL PLAN WOULD RELOCATE PUBLIC SAFETY TO 700 MHz

Relocating Public Safety to the Upper 700 MHz band enjoys significant industry and Congressional support and is the right thing to do given all of the competing considerations.¹⁵ Relocating Public Safety users to the Upper 700 MHz band will ensure effective and interference-free Public Safety communications for the long term, it is the most cost-effective

¹⁵ See, e.g., Reply Comments of 700 MHz Alliance at 15-19; Reply Comments of Cinergy Corp., WT Docket No. 02-55 at 36-45 (filed Aug. 7, 2002); Reply Comments Portland, WT Docket No. 02-55 at 9 (filed Aug. 7, 2002); Reply Comments of Consumers Energy Co., WT Docket No. 02-55 at 26-28 (filed Aug. 7, 2002); Reply Comments of CTIA, WT Docket No. 02-55 at 4-7 (filed Aug. 7, 2002); Reply Comments of DelMarva Power & Light Co., WT Docket No. 02-55 at 25-30 (filed Aug. 7, 2002); Reply Comments of Mobile Relay Associates, WT Docket No. 02-55 at 10 (filed Aug. 7, 2002); Reply Comments of Motient Communications, Inc., WT Docket No. 02-55 at 2 (filed Aug. 7, 2002); Reply Comments of MT Communications, WT Docket No. 02-55 at 8 (filed Aug. 7, 2002); Reply Comments of NAM/MRFAC, WT Docket No. 02-55 at 3 (filed Aug. 7, 2002); Reply Comments of the Public Safety Improvement Coalition, WT Docket No. 02-55 at 7-8 (filed Aug. 7, 2002); and Reply Comments of SCANA Corp., WT Docket No. 02-55 at 28-32 (filed Aug. 7, 2002).

solution, and it will provide Public Safety users with the greatest amount of additional and strategic spectrum to fulfill their long term needs.

The Upper 700 MHz proposal has several distinct features. It would provide Public Safety with a significant amount of contiguous, relatively underutilized, and unencumbered spectrum. This expanse of spectrum would offer a “clean slate” for critical Public Safety communications to develop and thrive without harmful interference, maximize the efficiency of Public Safety spectrum allocations, and enable more sophisticated applications. The Upper 700 MHz proposal would also permanently resolve the harmful interference problem by providing adequate separation from interference causing commercial communications and foster improved interoperability among Public Safety users.

The Commission took positive action by delaying the Upper 700 MHz auction so that a 700 MHz alternative could be considered as part of the resolution to the 800 MHz problem, and Congress has given every indication that it will support a Commission determination to relocate Public Safety licensees to the Upper 700 MHz band. The Commission should now follow through by breaking with the pattern of ineffective temporary fixes in the 800 MHz band and establishing a new, long-term plan for successful Public Safety communications in the 700 MHz band. A 700 MHz relocation solution would successfully resolve the array of problems currently experienced by Public Safety users in the 800 MHz band. It should at the same time adequately consider America’s vital industrial communications needs and not unduly jeopardize non-800 MHz services. Adoption of the Upper 700 MHz proposal would best fulfill the Commission’s goals in this proceeding.

IV. CONCLUSION

The “Consensus Plan” neither represents a broad industry consensus nor is the optimal solution to resolving Public Safety interference problems within the 800 MHz band. Instead, the Commission should adopt a solution that includes the relocation of 800 MHz Public Safety incumbents to the Upper 700 MHz band. The Commission should remain vigilant in its goal to permanently resolve the interference issues currently plaguing the 800 MHz band. Toward this end, the Commission should maintain a focus on the public interest, develop a consolidated proposed solution, and invite another round of public comment in this proceeding.

Respectfully submitted,

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September 23, 2002